

FIG.1 (A)

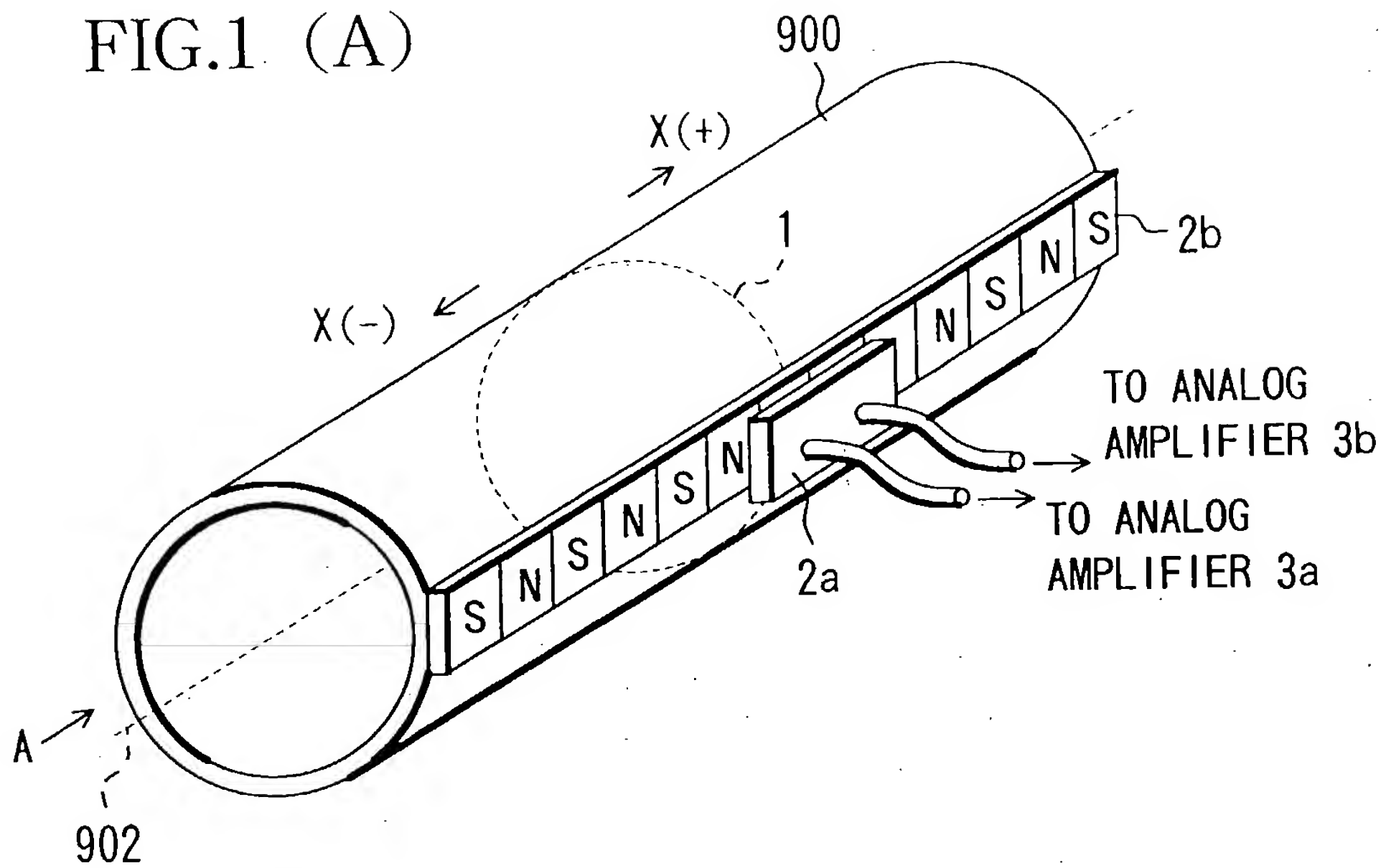


FIG.1 (B)

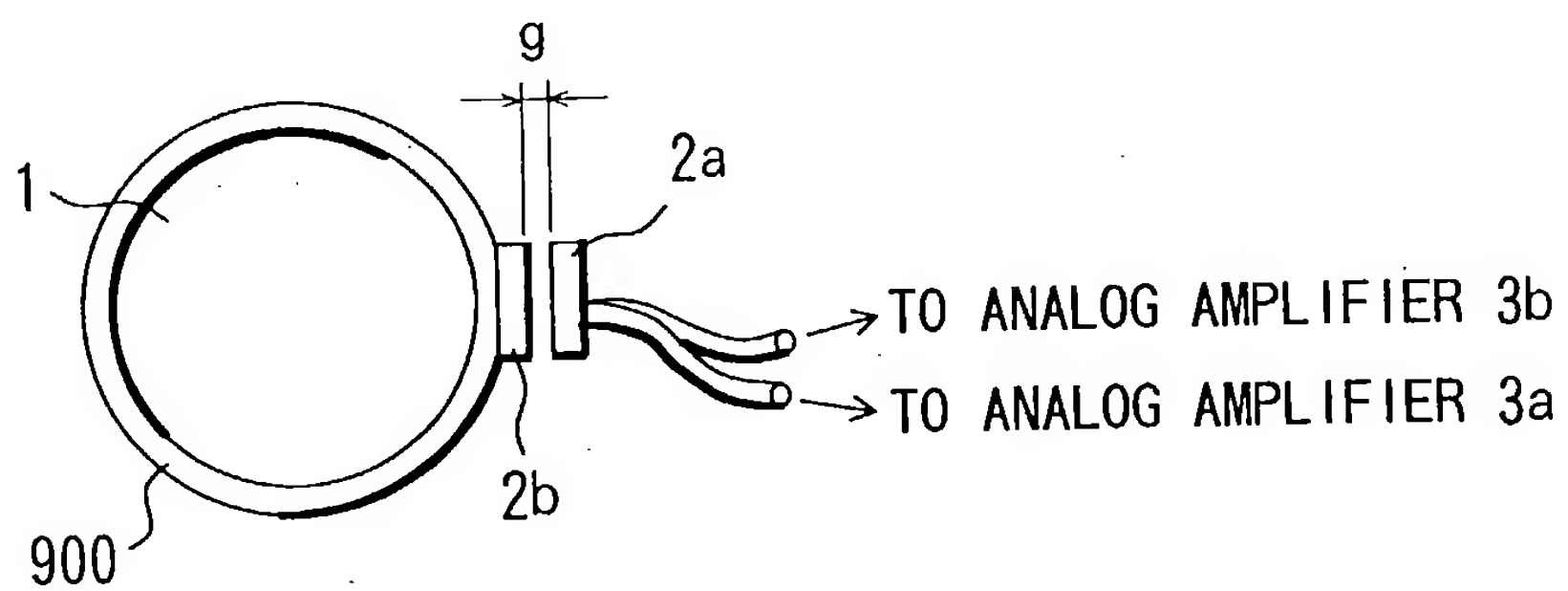


FIG.1 (C)

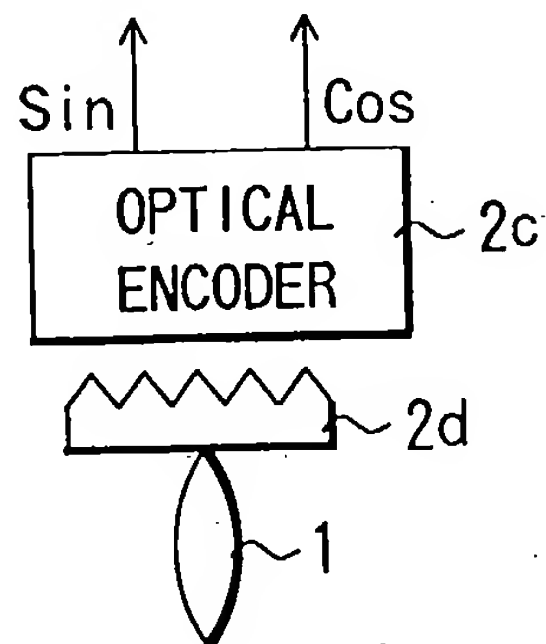


FIG. 2

The diagram illustrates an optical system with an auto-focus function. The system includes a lens assembly (105) and a motor (21) for focusing. Light from an object (106) passes through the lens and is picked up by an image pickup device (101). The device outputs two signals, SIN (3a) and COS (3b), which are amplified by comparators (3a, 3b). These signals are then processed by a signal processing circuit (102) and an auto-focus processing section (12). The auto-focus section outputs a lens target position (11) to a servo controller (13). The servo controller outputs a drive signal to a drive signal generating section (14), which then outputs a drive signal to a drive circuit (103). The drive circuit controls the motor (21). The entire system is enclosed in a dashed box labeled 107.

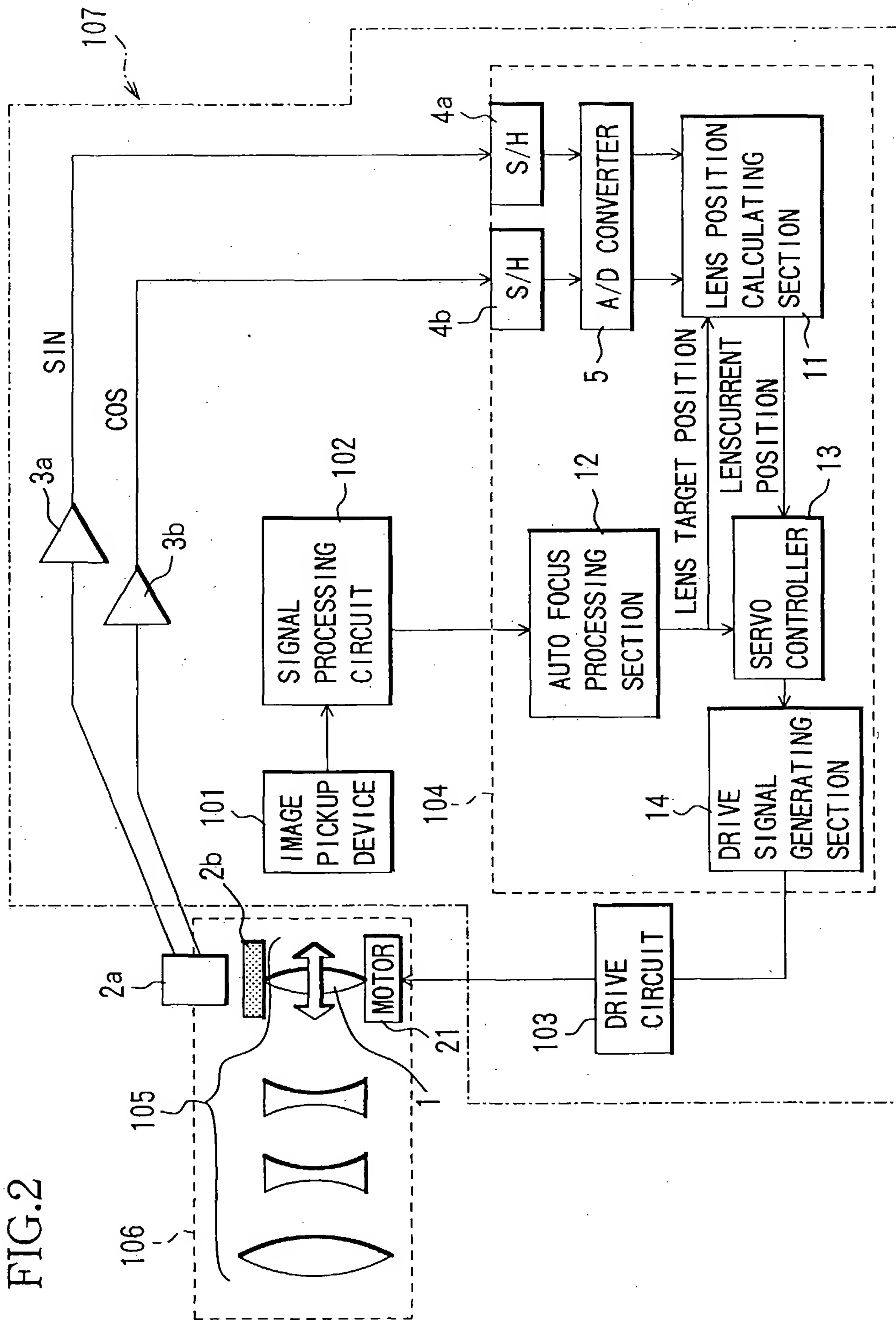


FIG.3

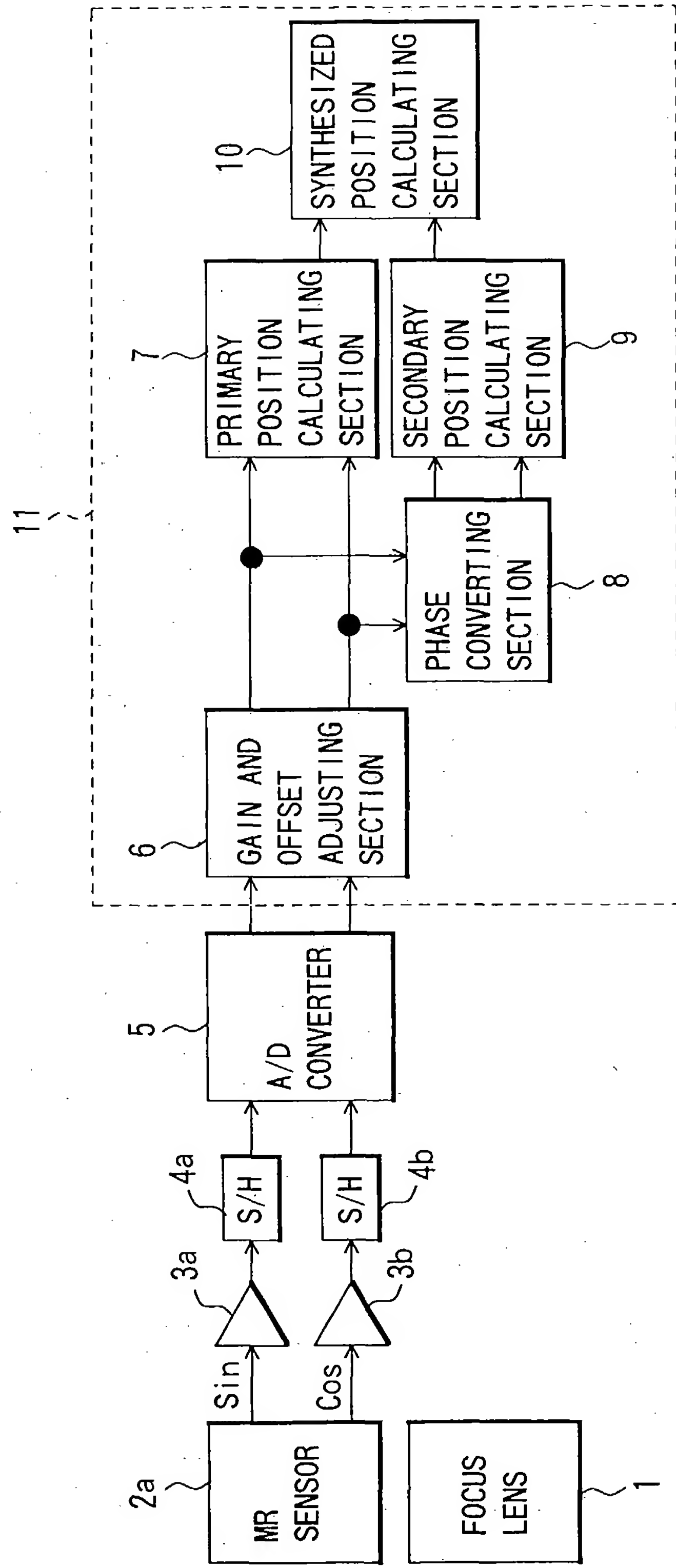


FIG.4

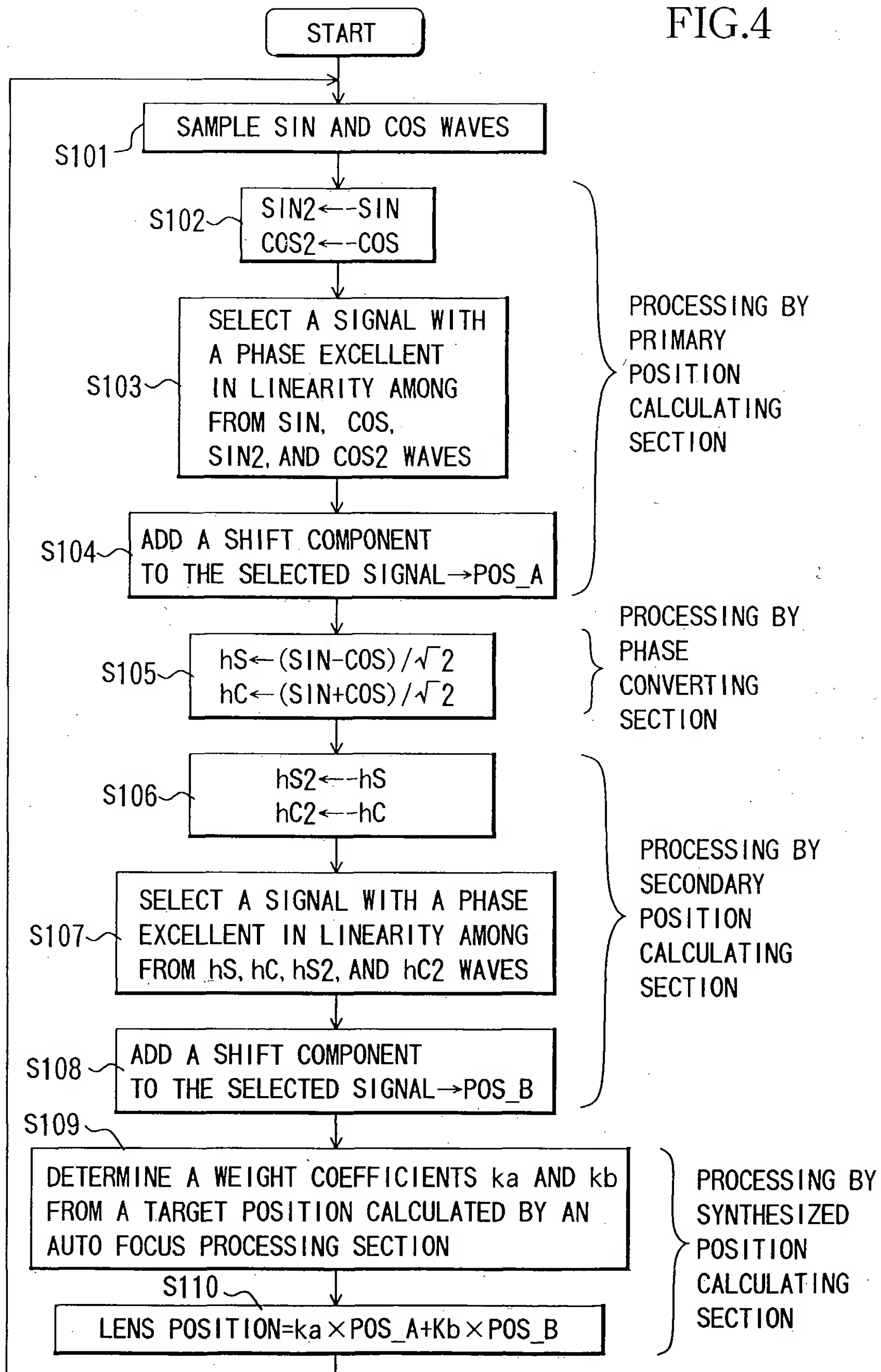


FIG.5

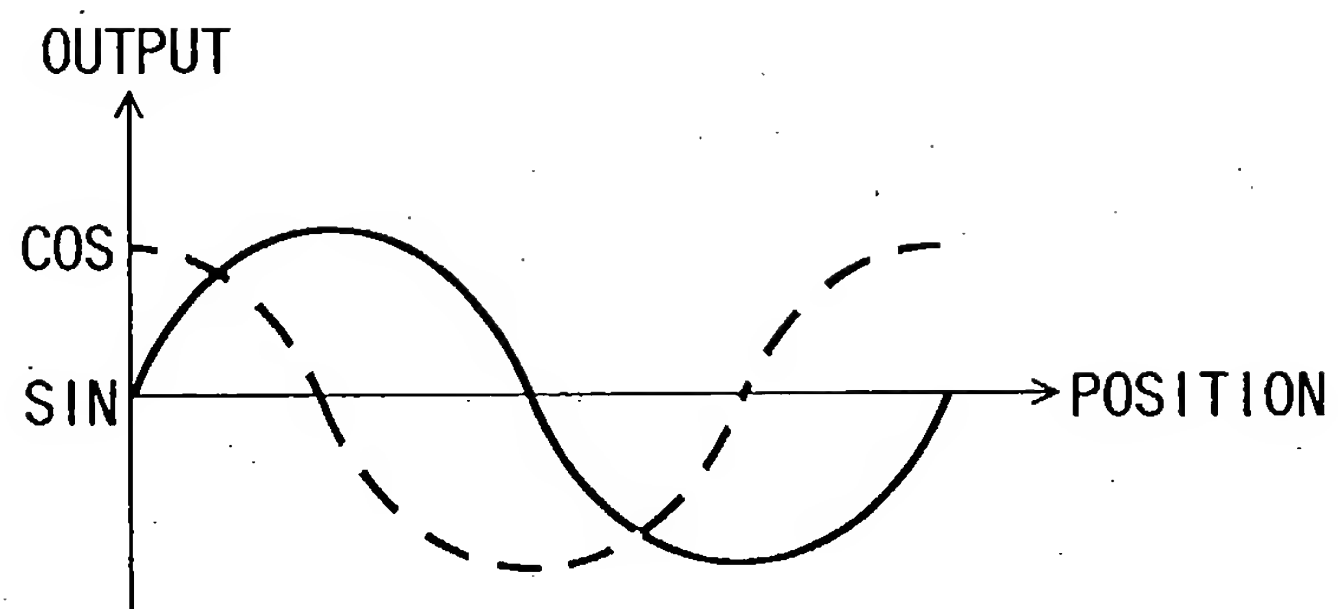


FIG.6

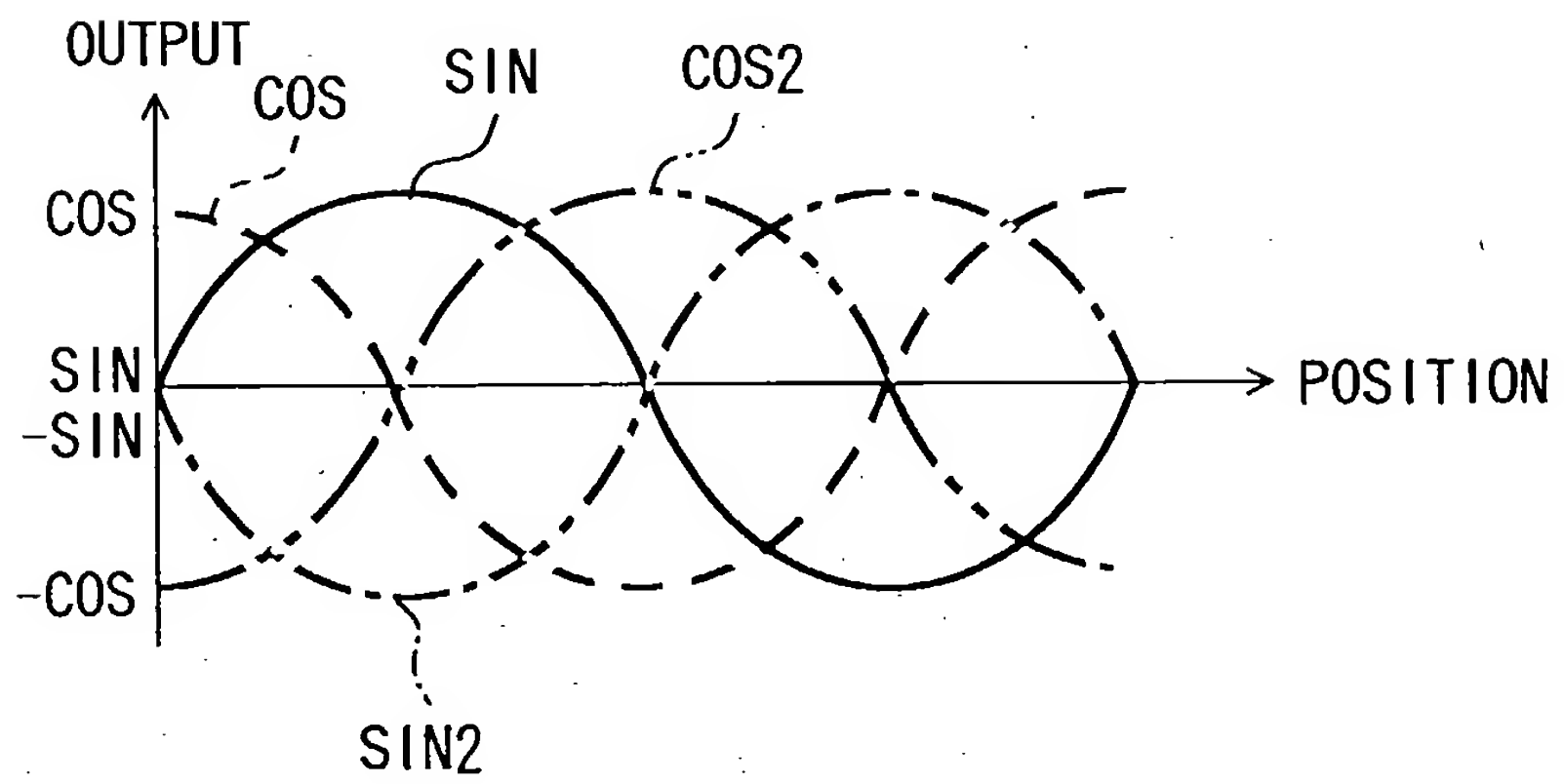


FIG.7

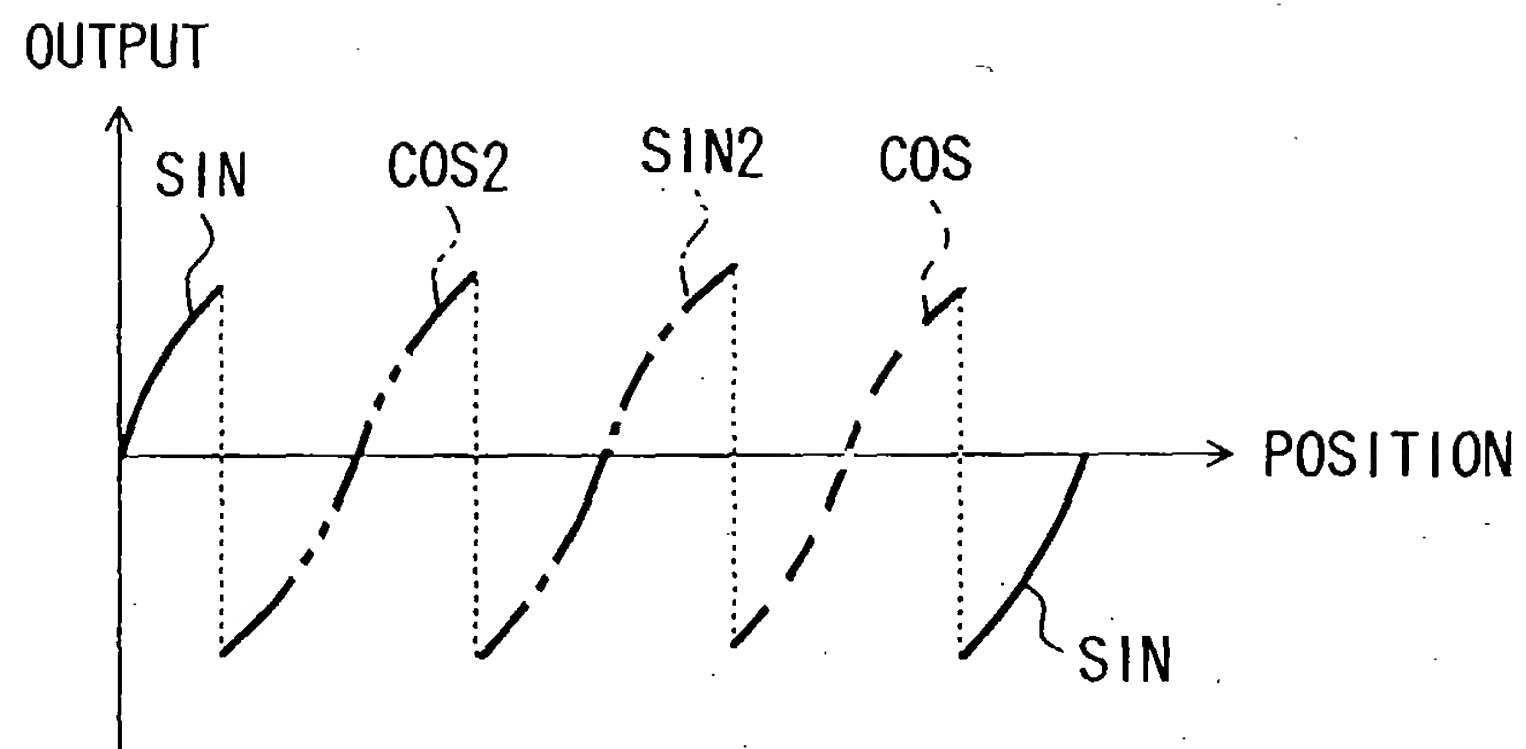


FIG.8

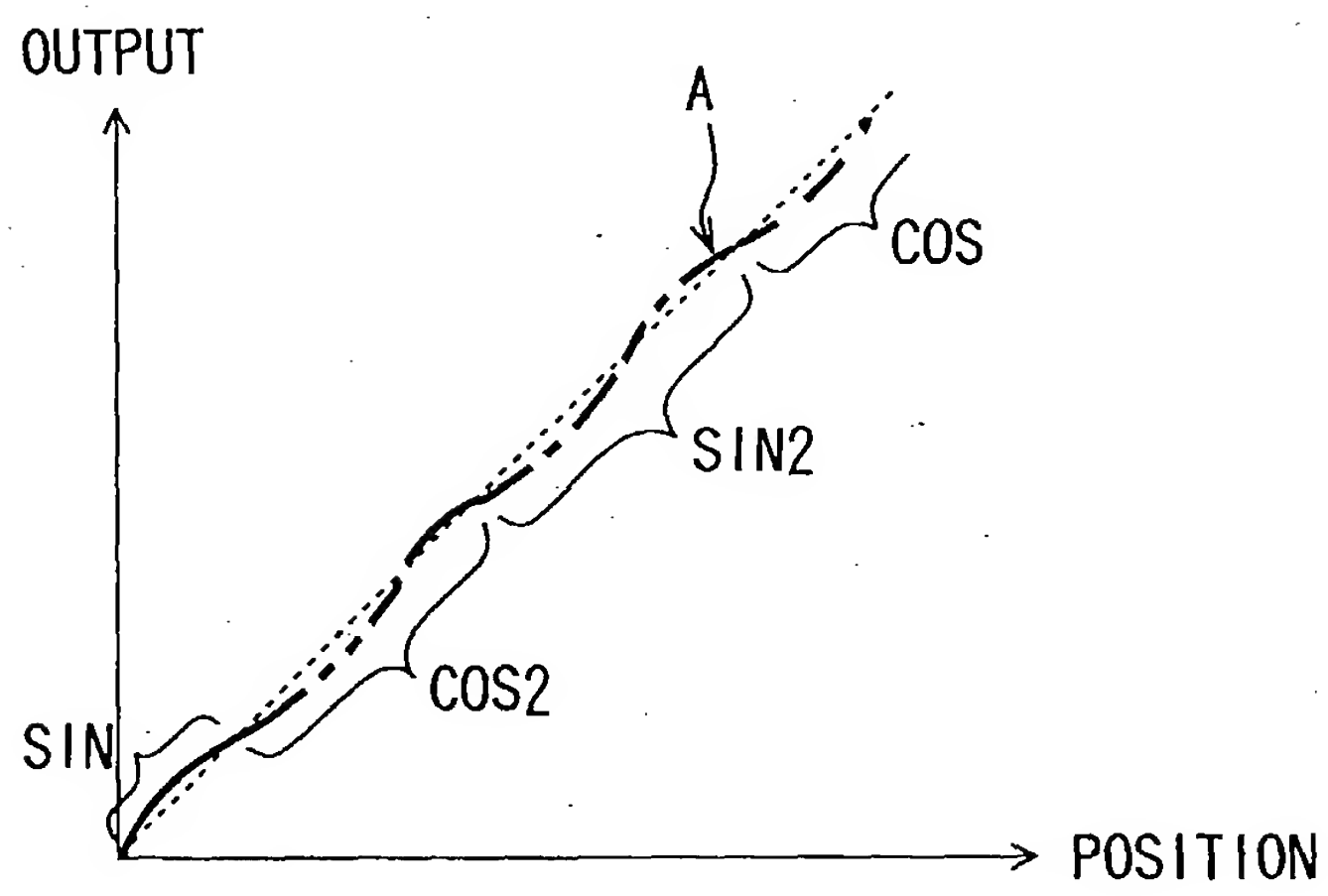


FIG.9

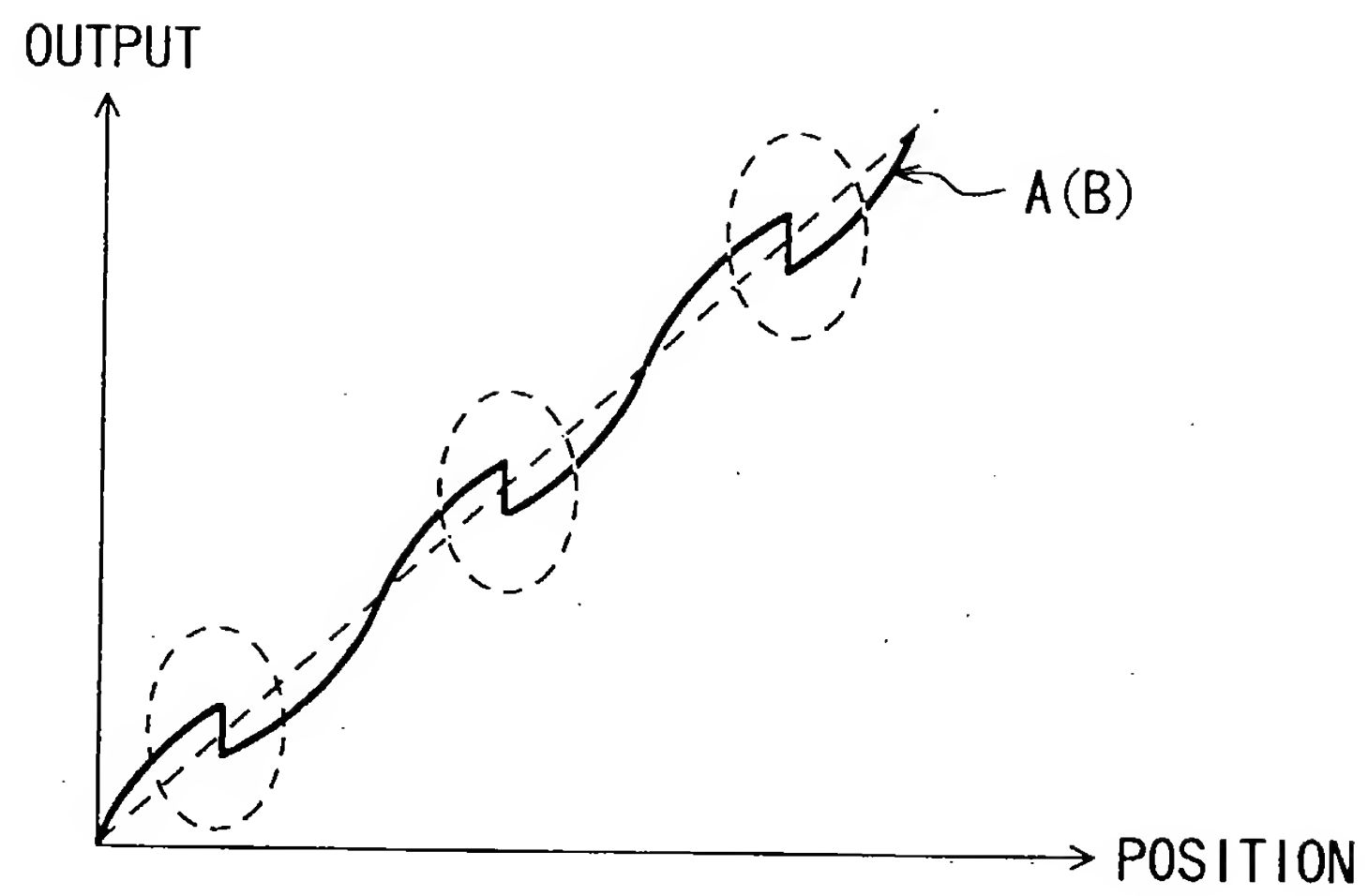


FIG.10

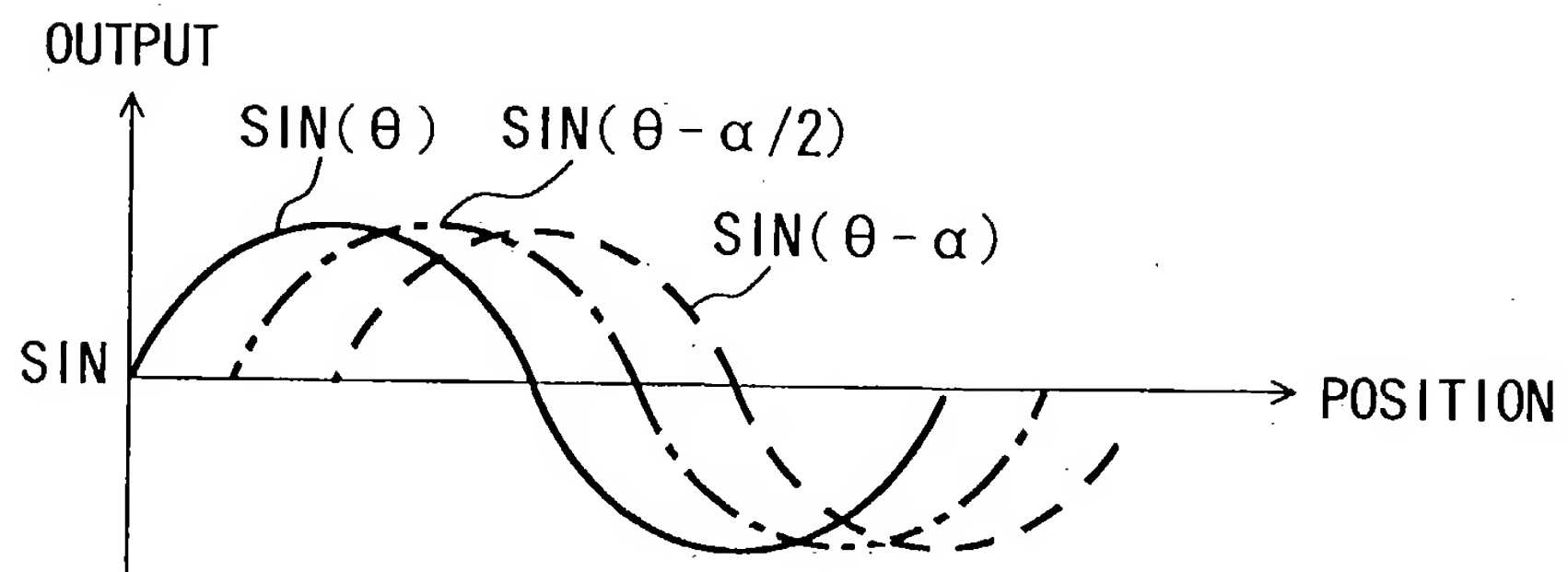


FIG.11

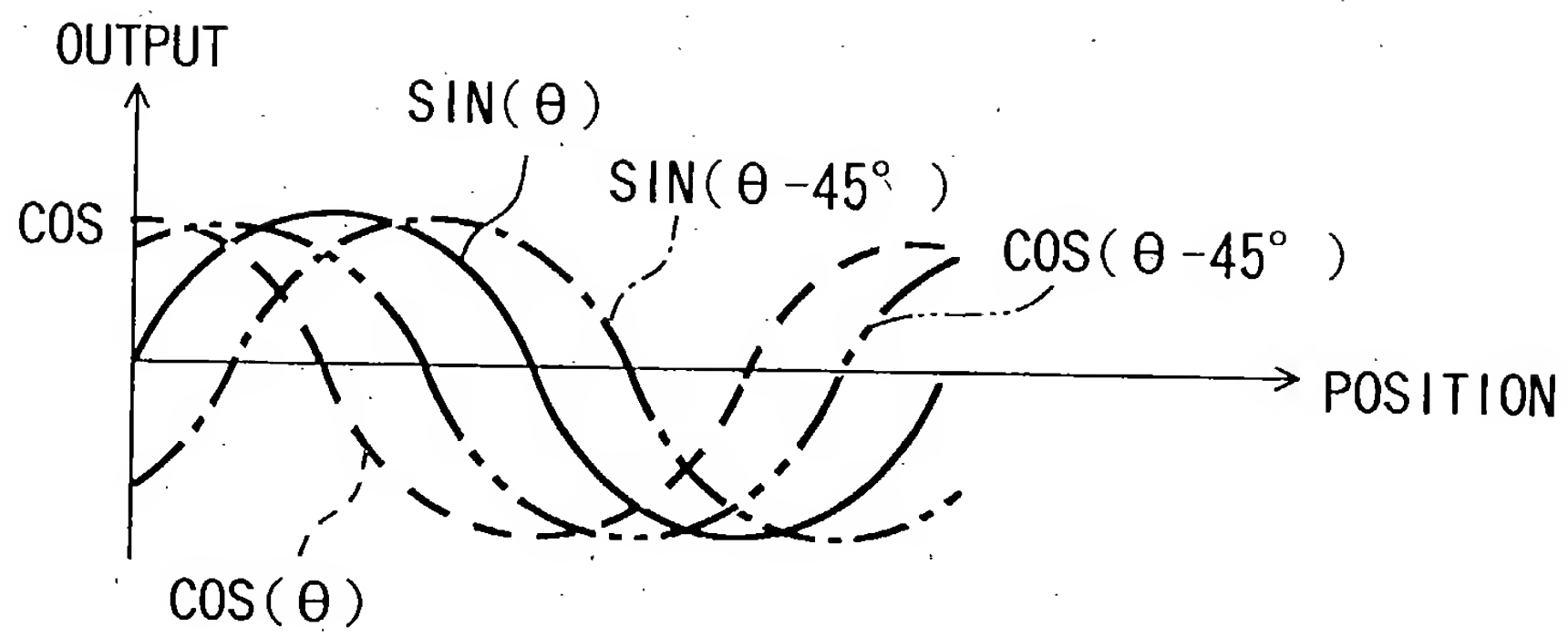




FIG.12 (A)

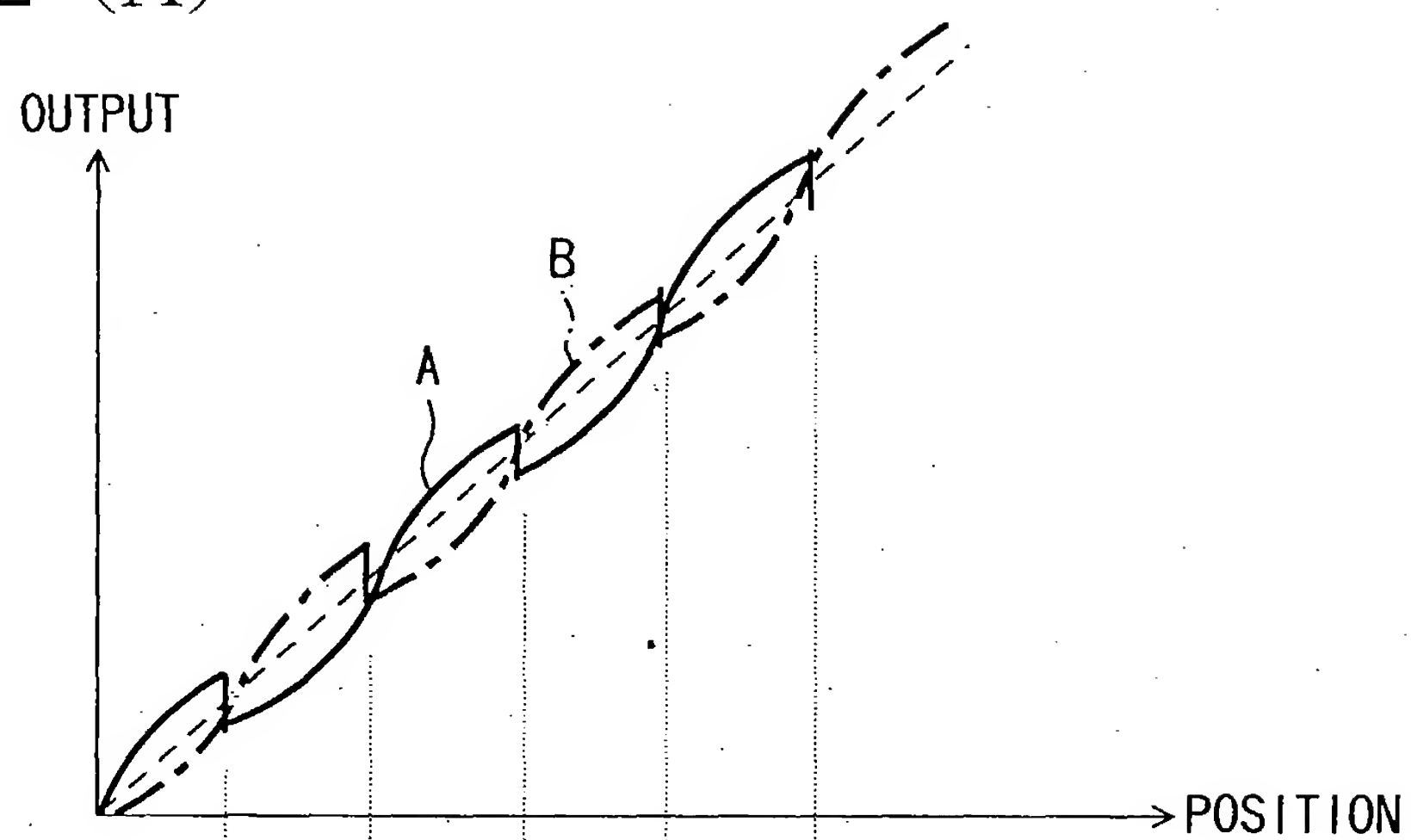


FIG.12 (B)

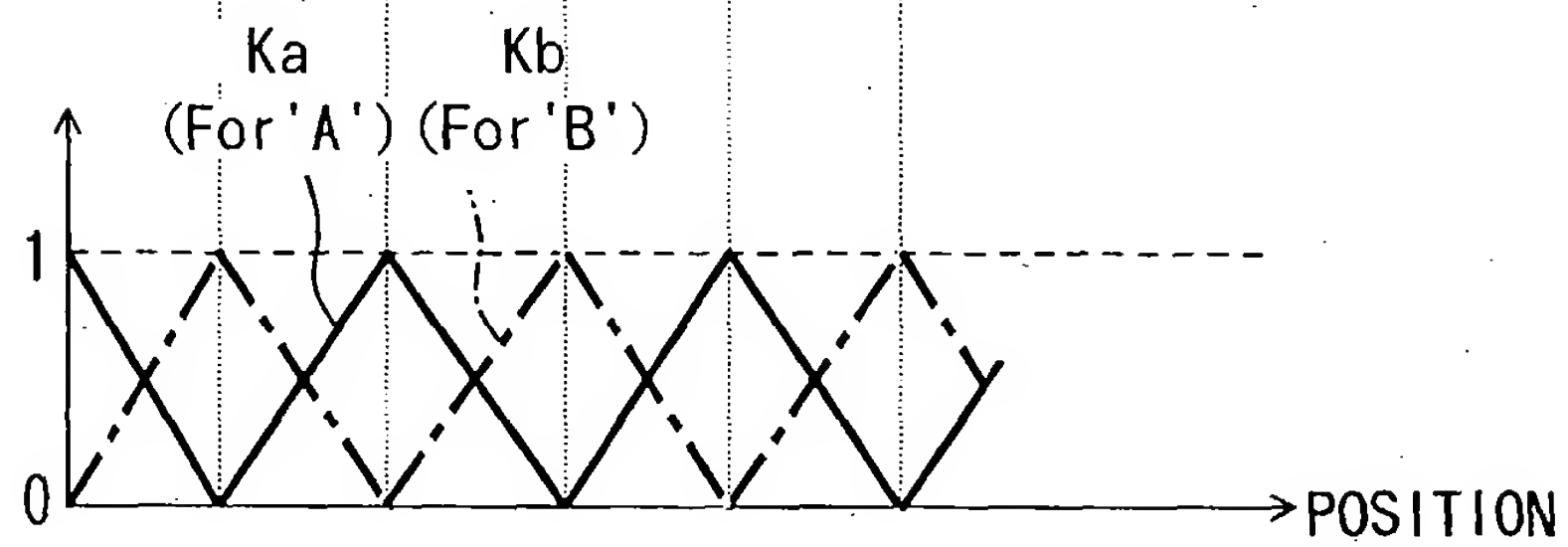


FIG.13

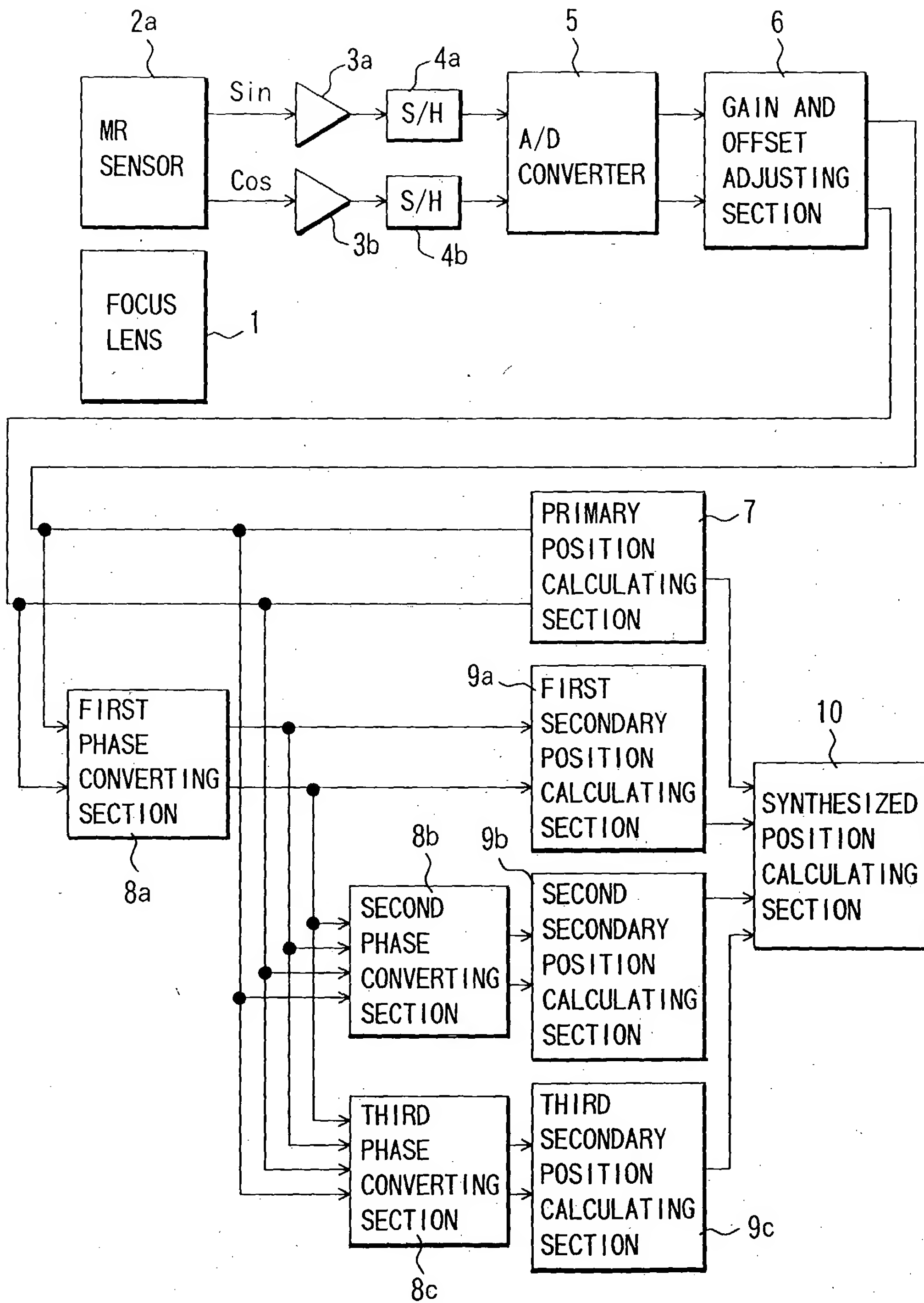


FIG.14 (A)

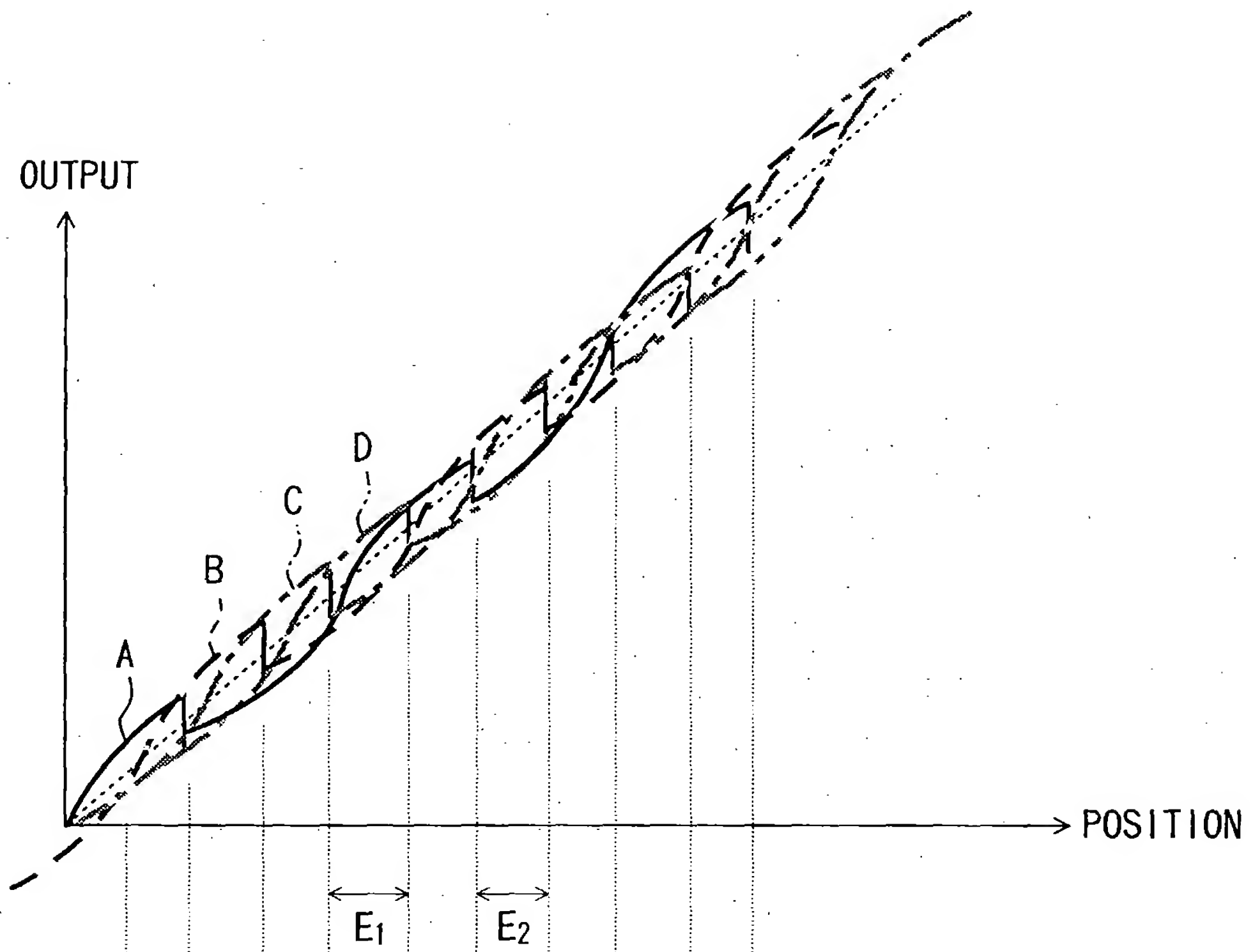


FIG.14 (B)

